

a³

23 would still comprise a ceramic tip manufactured from the same materials discussed above. However, the overall length of the tip could be reduced considerably. It is most desirable to leave at least about 7.5 mm, preferably at least about 10 mm, and most preferably at least about 12 mm between the skin of the patient and the exposed metal of the pin body. With ceramic cap-type pin tip 23, the pin tip need only be a total length comparable to the exposed portion of insert specified above. That is it is at least 7.5 mm, preferably at least 10 mm, more preferably at least 12 mm. These lengths are not ranges since pin tip 23 can be made longer with little fear of breakage since it gains strength from the metal pin body core. The tip 17 of the cap should be as described above with respect to pin tip 23. That is, pin tip 23 should have a proximal end which comes to a rounded tip 17, which slopes back to the body of pin tip 23 at an angle of between 30° and 50°, preferably about 40°. The radius of the rounded tip 17 of pin tip 23 is between 0.025 and 0.075 mm, preferably between 0.04 and 0.06 mm and more preferably about 0.05 mm.

In the Claims

Version with Markings to Show Changes to the Claims

- 5/27
C87
1. (Amended) A skull pin comprising:
a pin body; and
a pin tip formed from an insulating material, protruding from a proximal end of said pin body; wherein the protruding portion of said pin tip consists of a straight-sided portion and a tapered portion with a rounded tip.
 2. The skull pin of claim 1, wherein said insulating material is a ceramic material.

3. The skull pin of claim 1, wherein said insulating material is an electrical insulator.
4. The skull pin of claim 1, wherein said pin body includes a bore for receiving said pin tip.
5. The skull pin of claim 1, wherein said pin tip includes a bore for receiving said pin body.
6. (Amended) The skull pin of claim 1, wherein the ~~pin tip includes a tapered portion~~ has and having an angle between 30° and 50°.
7. (Amended) A kit comprising:
 - a halo; and
 - a skull pin, wherein said skull pin comprises
 - a pin body, and
 - an insert formed from an insulating material, protruding from a distal end of said pin body wherein the protruding portion of said insert consists of a straight-sided portion and a tapered portion with a rounded tip.
8. The kit of claim 7 wherein said insulating material is a ceramic.
9. (Amended) A kit comprising:
 - skull tongs; and
 - a skull pin, wherein said skull pin comprises
 - a pin body, and
 - an insert formed from an insulating material, protruding from a distal end of said pin body wherein the protruding portion of said insert consists of a straight-sided portion and a tapered portion with a rounded tip.

10. The kit of claim 9 wherein said insulating material is a ceramic.
11. (New) The pin of claim 1 wherein said straight-sided portion is cylindrical.
12. (New) The kit of claim 7 wherein said straight-sided portion is cylindrical.
13. (New) The kit of claim 9 wherein said straight-sided portion is cylindrical.
14. (New) The kit of claim 7 wherein the tapered portion has an angle between 30° and 50° and 50°.
15. (New) The kit of claim 9 wherein the tapered portion has an angle between 30° and 50° and 50°.